



## PUBLIC HEALTH FACT SHEET

## VHFs

### The Disease

Viral hemorrhagic (pronounced hem-e-raj-ik) fevers (VHFs) are a group of illnesses caused by several distinct families of viruses. In general, the term "viral hemorrhagic fever" is used to describe a severe illness that affects multiple organ systems in the body. These illnesses include, but are not limited to, Ebola, Marburg and yellow fever.

Characteristically, the blood vessels are damaged, and the body's ability to regulate itself is impaired. These symptoms are often accompanied by hemorrhage (bleeding); however, the bleeding is itself rarely life-threatening. While some types of hemorrhagic fever viruses can cause relatively mild illnesses, many of these viruses cause severe, life-threatening disease.

Viruses associated with most VHFs naturally live in animals. For the most part, rodents are carriers of viruses causing VHFs. Ticks and mosquitoes also serve as carriers for some of the illnesses. Viruses that cause VHFs are distributed over much of the globe.

Viruses carried in rodents are transmitted when humans have contact with urine, fecal matter, saliva or other body excretions from infected rodents. The viruses are also spread when a mosquito or tick bites a human, or when a person crushes a tick. Some of these insects may spread viruses to animals, such as livestock. Humans may then be infected when they care for or slaughter the animals.

Some viruses that cause hemorrhagic fever can spread from person to person. This type of transmission can occur directly through close contact with infected people or their body fluids. It can also occur indirectly, through contact with objects contaminated with infected body fluids.

### Symptoms

Symptoms can vary but often include fever, fatigue, dizziness, muscle aches, loss of strength and exhaustion.

Patients with severe cases of VHF often show signs of bleeding under the skin, in internal organs, or from openings in the body, including the mouth, eyes or ears. Patients rarely die because of blood loss. Severely ill patients may also show shock, nervous system malfunction, coma, delirium and seizures. Some types of VHFs are associated with kidney failure.

### Treatment

There is no treatment or established cure for VHFs. Patients are given supportive therapy such as fluids, nutrition, blood transfusions or medication to support blood pressure.

## Reducing the Risk

With the exception of yellow fever and Argentine hemorrhagic fever, for which vaccines have been developed, no vaccines exist that can protect against these diseases. Therefore, prevention efforts must concentrate on avoiding contact with host species. Because many of the hosts that carry hemorrhagic fever viruses are rodents, disease prevention efforts include controlling rodent populations and encouraging safe cleanup of rodent nests and droppings.

For hemorrhagic fever viruses spread by insects, prevention efforts often focus on insect control. In addition, people should use insect repellent, proper clothing, bed nets, window screens and other insect barriers to avoid being bitten.

**For viruses that spread from person to person, avoiding close physical contact with infected people and their body fluids is the best way to control the spread of disease.** Infection control techniques include isolating infected individuals and wearing protective clothing. Other infection control recommendations include proper use, disinfection, and disposal of instruments and equipment used in treating or caring for patients with VHF, such as needles and thermometers.

## VHFs and Bioterrorism

According to the Centers for Disease Control and Prevention (CDC), a VHF virus could be used as a biological weapon. If the virus were released intentionally, it could result in sickness and death.

## For More Information Contact

- Your healthcare provider
- Your local department of health
- The New Jersey Dept. of Health and Senior Services, Communicable
- Disease Service at (609) 588-7500
- You can also visit the following websites:

The New Jersey Department of Health and Senior Services website at  
[www.nj.gov/health](http://www.nj.gov/health)

The CDC website at <http://www.bt.cdc.gov/agent/vhf>.